



# Application for Planning Approval

## *Land Use Planning and Approvals Act 1993*

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APPLICATION NO.

**DA2025/060**

LOCATION OF AFFECTED AREA

**121 BRAEVIEW DRIVE, OLD BEACH**

DESCRIPTION OF DEVELOPMENT PROPOSAL

**OUTBUILDING**

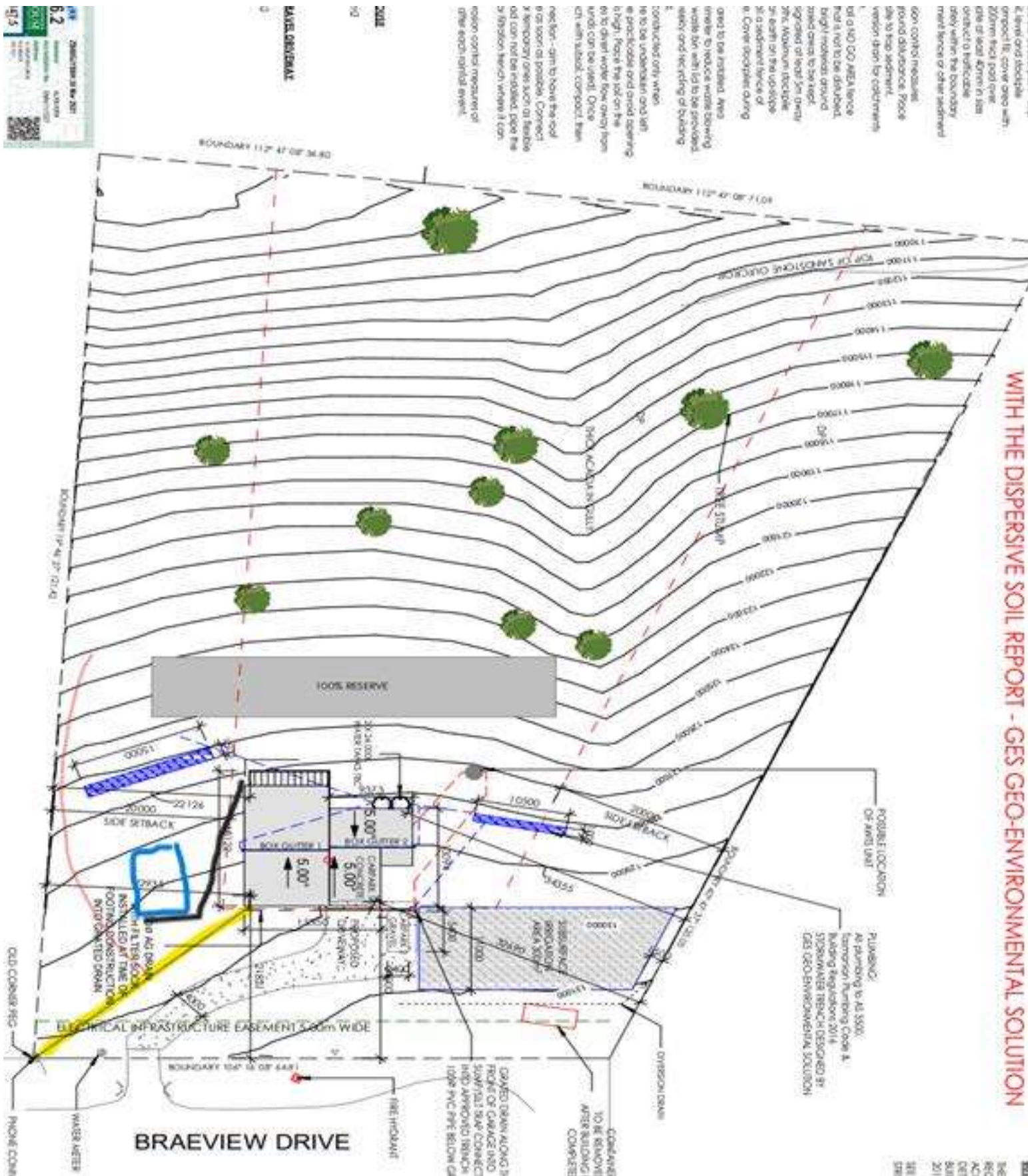
A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT [www.brighton.tas.gov.au](http://www.brighton.tas.gov.au) AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON **25/06/2025**. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT [development@brighton.tas.gov.au](mailto:development@brighton.tas.gov.au). REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

**JAMES DRYBURGH**  
**Chief Executive Officer**



**Brighton**  
going places

2017

[illegible]

## Dang Van

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**From:** Doyle, Thomas [REDACTED]  
**Sent:** Friday, 6 June 2025 2:39 PM  
**To:** Development  
**Subject:** Request for further information - DA 2025 / 00060 (121 Braeview Drive, Old Beach)  
**Attachments:** 121 Braeview Drive mark up .png

**Caution:** This is an external email and may be **malicious**. Please take care when clicking links or opening attachments.

Hi Dang

The shed will be 20m from the front boundary

There are no plans to extend the current FCR driveway, the driveway as it is now, is left over FCR and 40mm Road base that was spread out after the build.

The area of the spread out is 5m wide by 12m Long, the works will not involve the release of concentrated stormwater or result in the disturbance of natural soils. All stormwater caught by the proposed shed will be piped and join the soakage trenches behind the shed

If you require any further info, please let me know

Regards

**Thomas Doyle**



[taswater.com.au](https://taswater.com.au)



**Disclaimer**

## Dang Van

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**From:** Doyle, Thomas [REDACTED]  
**Sent:** Friday, 16 May 2025 12:54 PM  
**To:** Dang Van  
**Subject:** RE: Request for additional information - DA 2025 / 00060 (121 Braeview Drive, Old Beach)  
**Attachments:** 121 Braeview Drive shed mark .PNG; IMG\_0310.jpeg  
**Follow Up Flag:** Flag for follow up  
**Flag Status:** Flagged

**Caution:** This is an external email and may be **malicious**. Please take care when clicking links or opening attachments.

Hi Dang

The shed will be 11m off the side boundary and 6m from the brickworks of the house

There will be no alterations to the driveway, we have an FCR/road base driveway, I have attached a photo for your reference

Let me know if you require any further information

Regards

**Thomas Doyle**



**From:** Dang Van <dang.van@brighton.tas.gov.au>  
**Sent:** Wednesday, 7 May 2025 2:10 PM  
**To:** Doyle, Thomas [REDACTED]  
**Subject:** Request for additional information - DA 2025 / 00060 (121 Braeview Drive, Old Beach)

**CAUTION:** This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender.

Good afternoon Thomas,







# CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94  
Section 106  
Section 129  
Section 155

Form **35**

To:  Owner name  
 Address  
  Suburb/postcode

## Designer details:

Name:  Category:   
 Business name:  Phone No:   
 Business address:   
  Fax No:   
 Licence No:  Email address:

## Details of the proposed work:

Owner/Applicant  Designer's project reference No.   
 Address:  Lot No:

Type of work: Building work ☒ Plumbing work ☐ (X all applicable)

## Description of work:

New class 10a building (non-habitable shed) with importance Ivl 2 of size 6.000m span x 9.000m long x 2.400m eaves height. The building consists of cold formed steel framing members and cladding along with reinforced concrete pavement slab on ground where shown.

(new building / alteration /  
addition / repair / removal /  
re-erection  
water / sewerage /  
stormwater /  
on-site wastewater  
management system /  
backflow prevention / other)

## Description of the Design Work (Scope, limitations or exclusions): (X all applicable certificates)

Certificate Type:	Certificate	Responsible Practitioner
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input checked="" type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	
Deemed-to-Satisfy: <input checked="" type="checkbox"/>	Performance Solution: <input type="checkbox"/> (X the appropriate box)	

**Other details:**

The design complies with the following deemed-to-satisfy parts of 2022 NCC-BCA Vol. 2 & Housing Provisions:

- Part H1D4(1)(a)(ii) for resistance of concrete (AS3600)
- Housing provision 2.2.4 for resistance of fastenings in concrete (AS5216)
- Part H1D6(3)(c) for resistance of cold-formed steel members (AS/NZS4600)
- Housing provision 2.2.3(a), (b) & (c) for the following actions to AS/NZS1170 parts 1 to 4:
  - o Imposed: 2.5 kPa to slab (light vehicles) where slab is shown
  - o Wind: Importance level 2, Region A4, Terrain Cat. 2.78, Topographic (Mt) 1.00, Shielding (Ms) 1.00 and Site wind speed ( $V_{sit,\beta}$ ) 38.10 m/s
  - o Snow: 0.00 kPa
  - o Earthquake: Design category I

**Design documents provided:**

The following documents are provided with this Certificate –

*Document description:*

Drawing numbers:	Prepared by:	Date:
LAUS95983520 sheets 1 to 11 revision A	Venn Engineering Pty Ltd	02/10/2024
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

**Standards, codes or guidelines relied on in design process:**

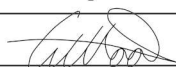
2022 National Construction Code – Building Code of Australia Volume 2 & Housing Provisions  
Australian Standard for Structural design Actions parts 0, 1, 2, 3 & 4 (AS/NZS 1170)  
Australian Standard for Cold-formed Steel Structures (AS/NZS 4600:2018)  
Australian Standard for Concrete Structures (AS 3600:2018)  
Australian Standard for Post-installed Fasteners in Concrete (AS 5216:2021)  
Australian Steel Institute Design Guide Portal Frame Steel Sheds and Garages 2nd edition June 2014

**Any other relevant documentation:****Attribution as designer:**

I, Grant Wood, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	Name: (print)	Signed	Date
Designer:	Grant Wood		02/10/2024
Licence No:	690930425		

## Assessment of Certifiable Works: (TasWater)

**Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.**

**If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.**

**TasWater must then be contacted to determine if the proposed works are Certifiable Works.**

**I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:**

- ☐ The works will not increase the demand for water supplied by TasWater
- ☐ The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- ☐ The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- ☐ The works will not damage or interfere with TasWater's works
- ☐ The works will not adversely affect TasWater's operations
- ☐ The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- ☐ I have checked the LISTMap to confirm the location of TasWater infrastructure
- ☐ If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

## Certification:

I ..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: [www.taswater.com.au](http://www.taswater.com.au)

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<input type="text"/>	<input type="text"/>	<input type="text"/>





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CONSTRUCTION PACKAGE NOTES

This construction package is to be used in conjunction with the created order for the job. All lengths and piece marks of material in this package will correspond to an item in the order. For example, on the Sidelwall A girt layout there will only be an item with a piece mark of SGA-1. This will correspond to a line item in the order with the piece mark of SGA-1. Please note, do not include a piece mark will be unique with the product code.

All girt layout and sheeting layout drawings in this construction package are exterior views, and in these illustrations, components are shown as if viewed from the outside of the building.

All drawings in this construction package are for reference only, and are to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

CONSTRUCTION NOTIFICATIONS

The following items will require non-typical installation that will take extra time and care during the construction process. Please take precautions.

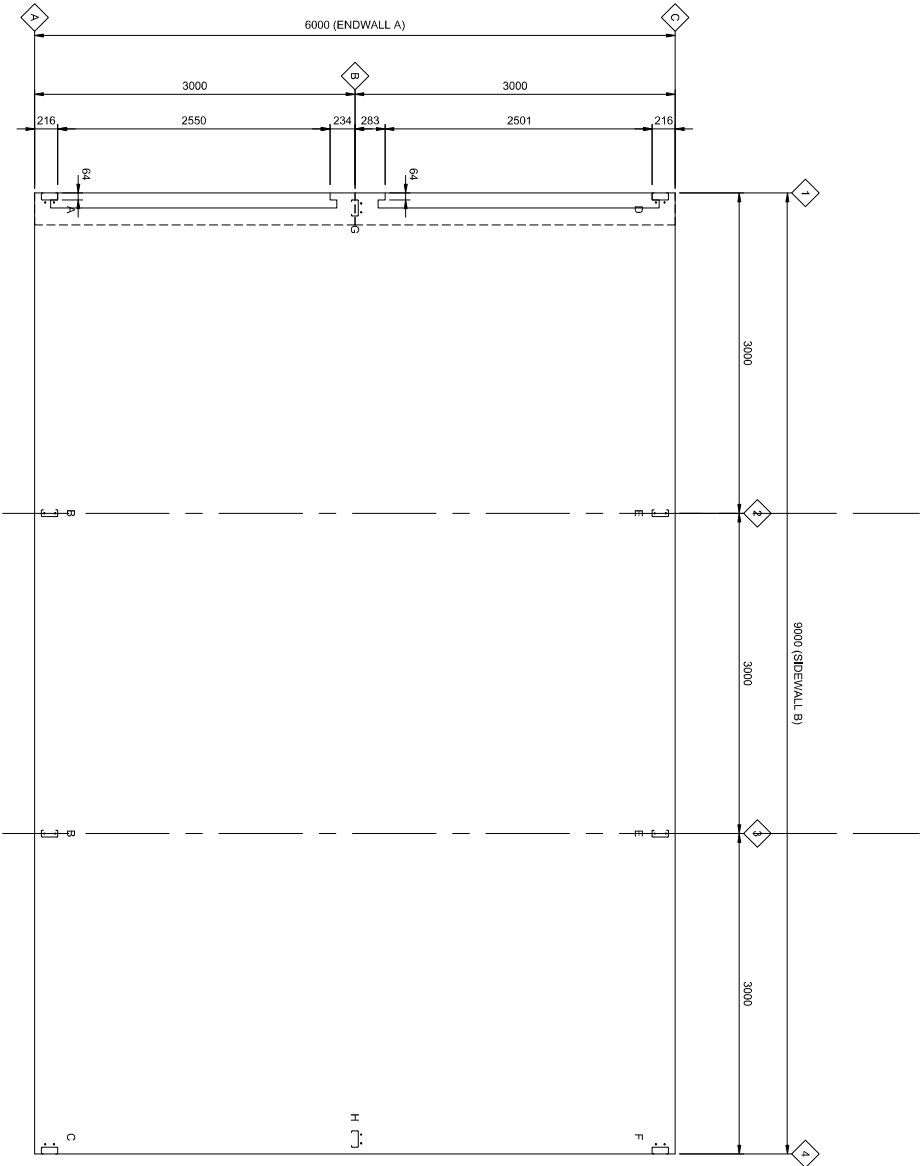
Some opening headers in building do not match girt size in wall. In these cases standard header installation will not be possible and header will need to be installed with web of header pointed to outside of building instead of pointing down.

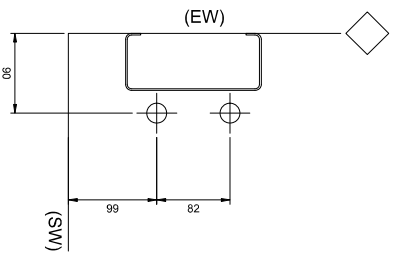
Some items in order will need to be cut to length on site. Please see Notes column in order for all list of items to be cut and their lengths.



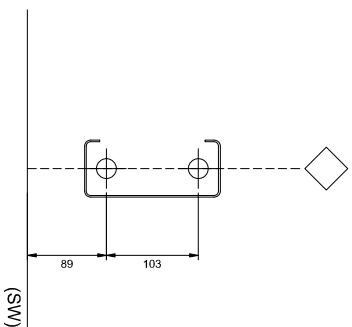
This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

ANCHOR BOLTS		
QTY	LOCATION	DIA
16	ANCHOR BOLTS - SIDEWALL COLUMNS	11 mm
4	ANCHOR BOLTS - ENDWALL COLUMNS	11 mm
4	ANCHOR BOLTS - ROLLER DOORS SMALL	11 mm
2	ANCHOR BOLTS - PA DOORS	11 mm

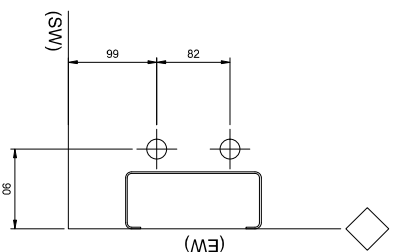




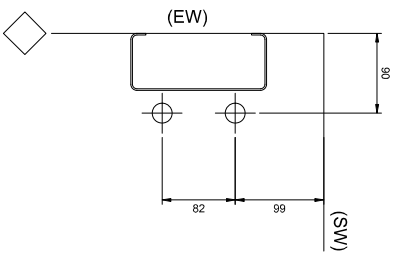
A



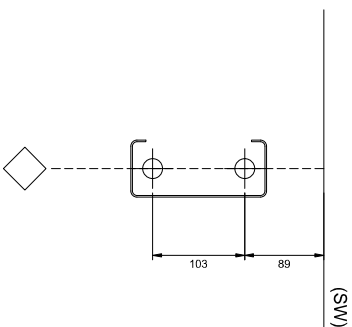
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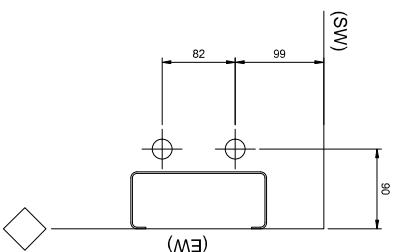
C



D



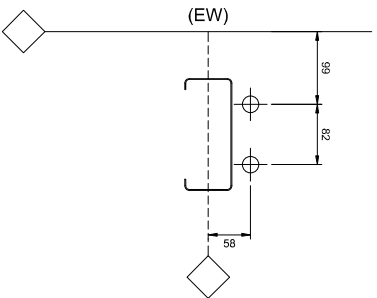
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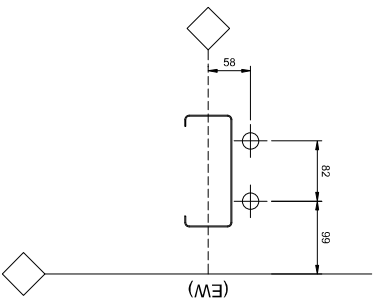
F

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





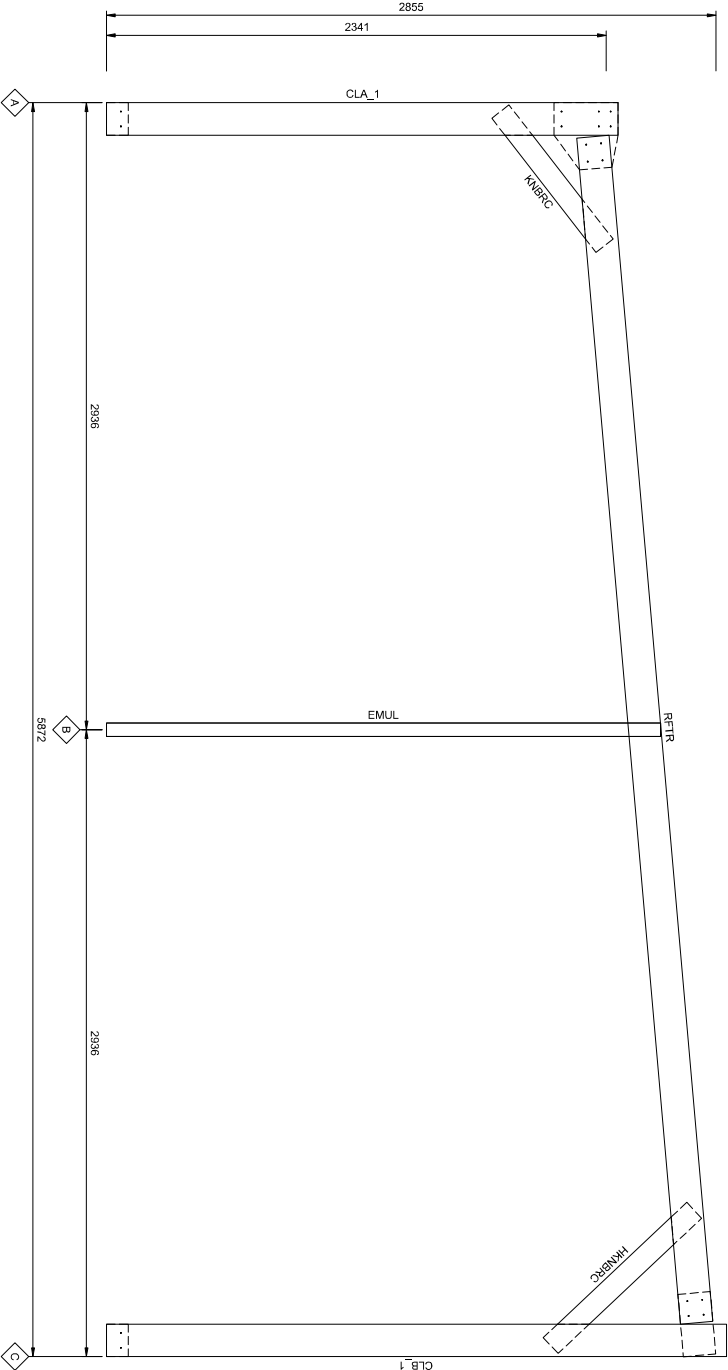
G



H

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

MEMBER TABLE		
Mark	Product	Length
CLA_1	C18019	2307 mm
CLB_1	C18019	2305 mm
EMUL	C18017	2306 mm
KNBRC	C18016	924 mm
KNBRC	C18018	759 mm
RTTR	C18019	5576 mm



1

5

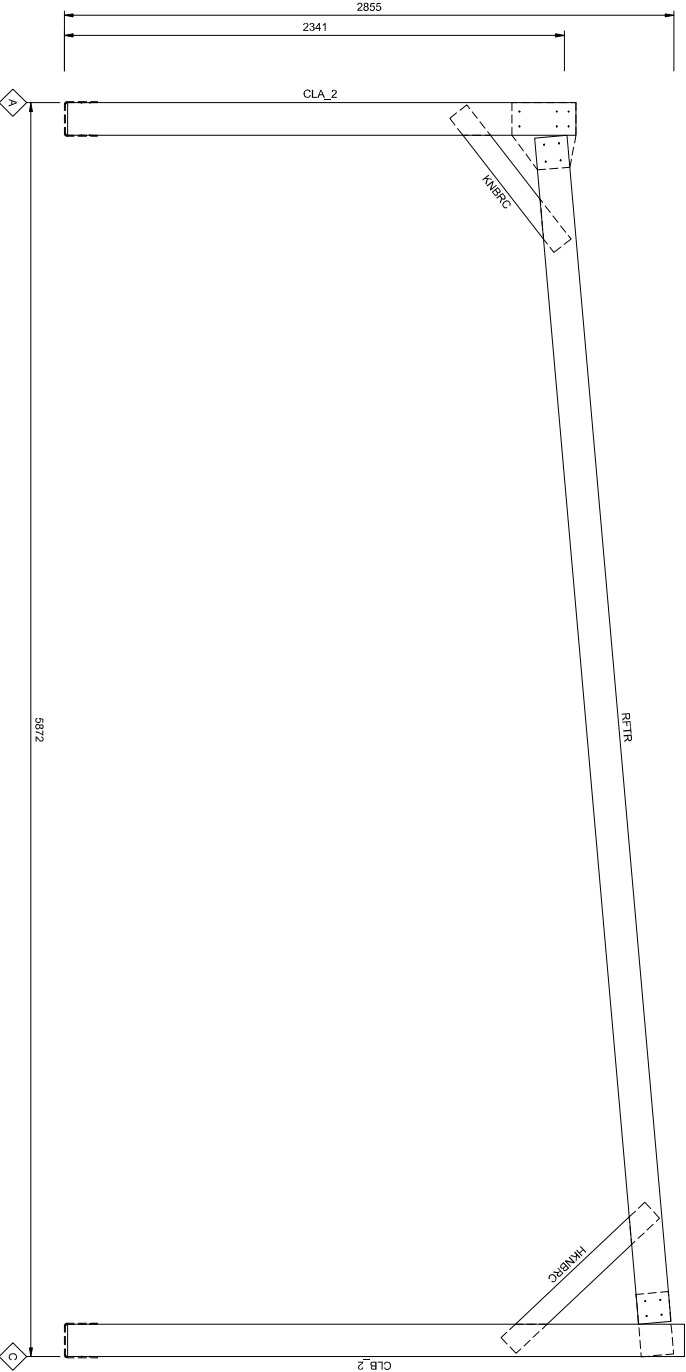
Portal Section

SCALE: 1:25

Frame Line 1



MEMBER TABLE		
Mark	Product	Length
CLA_2	C15019	2382 mm
CLB_2	C15019	2380 mm
KNBRC	C10015	924 mm
KNBRC	C10015	759 mm
RFTR	C15019	5576 mm



1

Portal Section

6

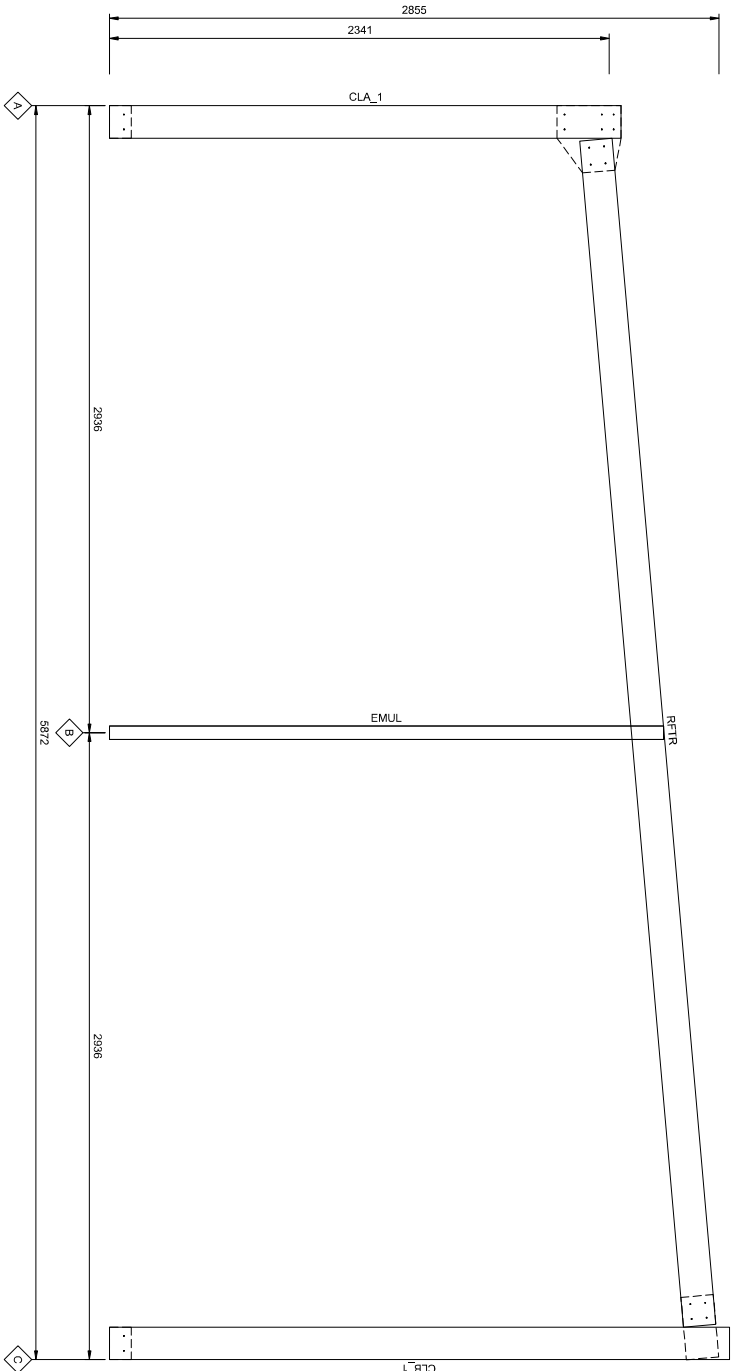
SCALE: 1:25

Frame Lines 2 and 3





MEMBER TABLE	
Member	Product Length
CLA_1	C15019 2307 mm
CLB_1	C15019 2305 mm
EMUL	C15017 2305 mm
RFTR	C15019 3578 mm



1

7

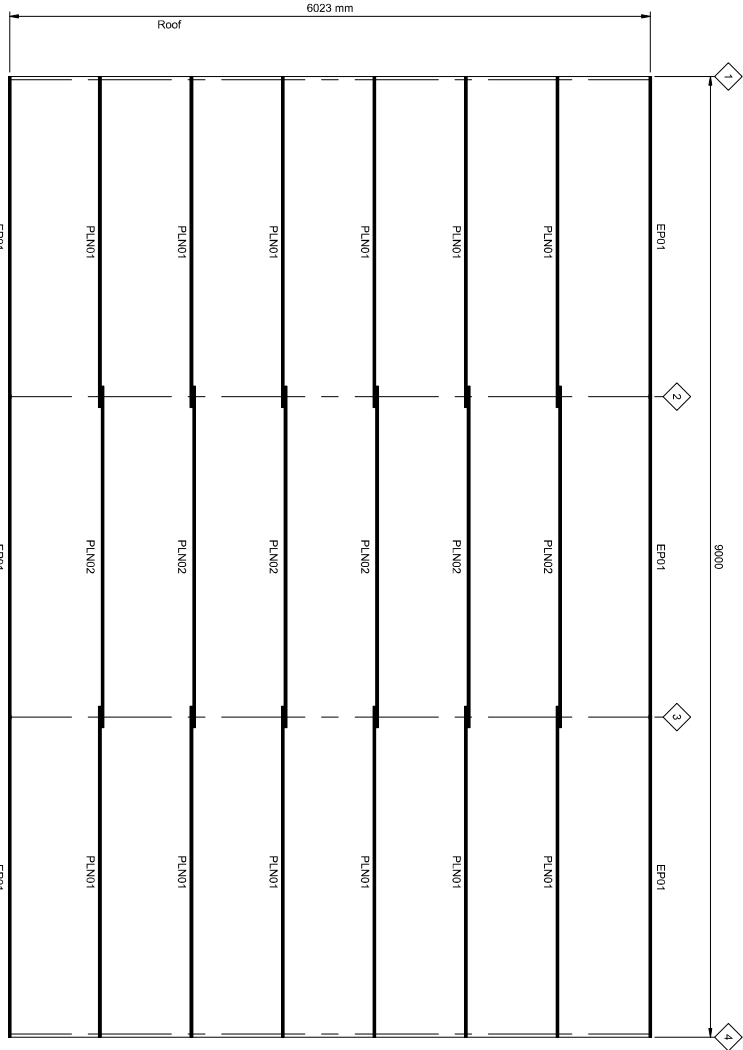
Portal Section

SCALE: 1:25

Frame line 4

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

MEMBER TABLE		
Mark	Product	Length
EP01	C10016	3000 mm
PLN01	176408	3100 mm
PLN02	176495	3200 mm



Roof Sheeting:  
Corrugated 0.42  
Galf

# Roof Framing Plan

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

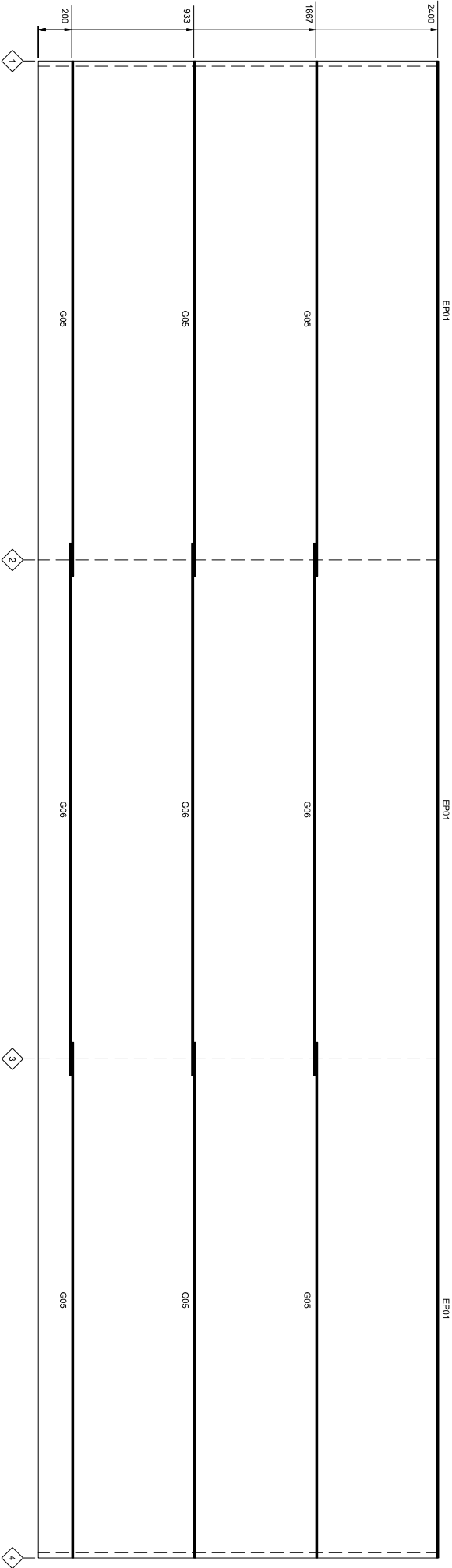


JOBNO LAUS95983520  
SHEET 8 of 17

DATE 02-10-2024  
SCALE 1:50



MEMBER TABLE		
Member	Product	Length
EP01	C10016	3600 mm
GS05	17H4095	3100 mm
GS02	17H4095	3200 mm



1/9

Sidewall A Girt Layout

SCALE: 1:25

Frame Line A

Girt Layout

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.



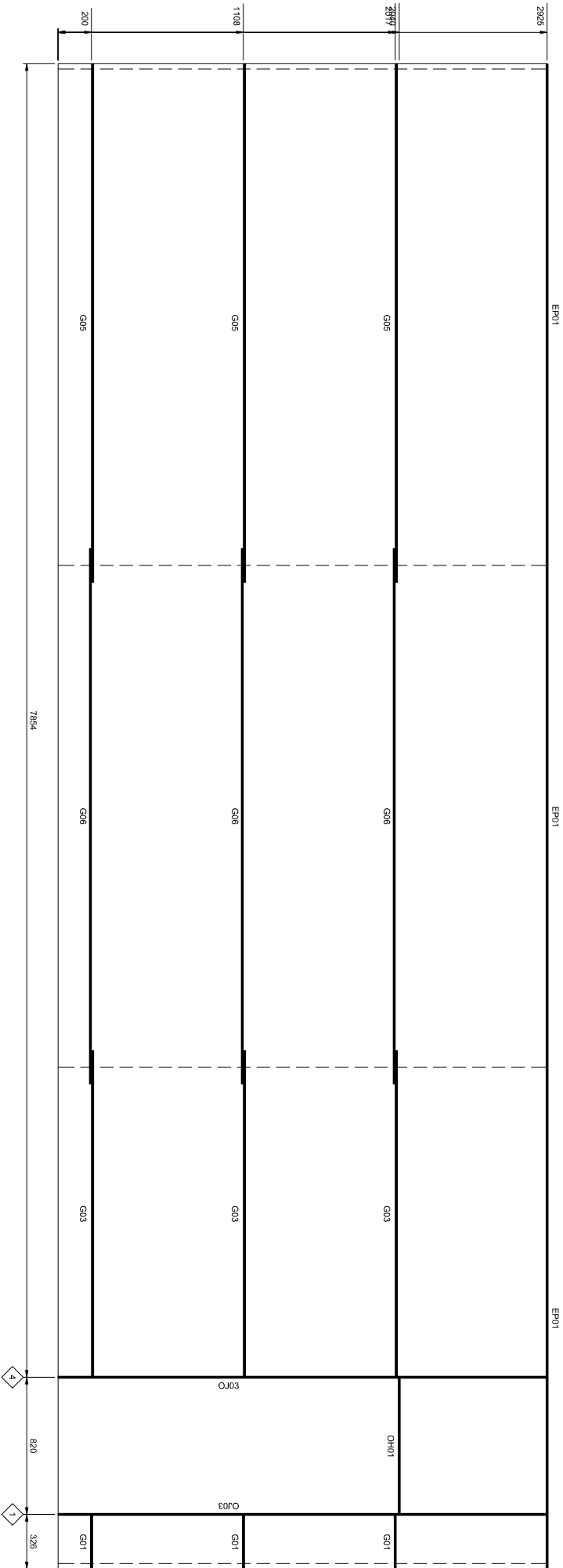
JOBNO LAUS95983520  
SHEET 9 of 17

DATE 02-10-2024  
SCALE 1:25





MEMBER TABLE		
Mark	Profile	Length
EP01	C10015	3000 mm
GO1	TH648	326 mm
GO2	TH648	1984 mm
GO3	TH648	3100 mm
GO4	TH648	3200 mm
GO5	C10015	326 mm
GO6	PA Door Jamb 64.24mm	Stock Length



1

10

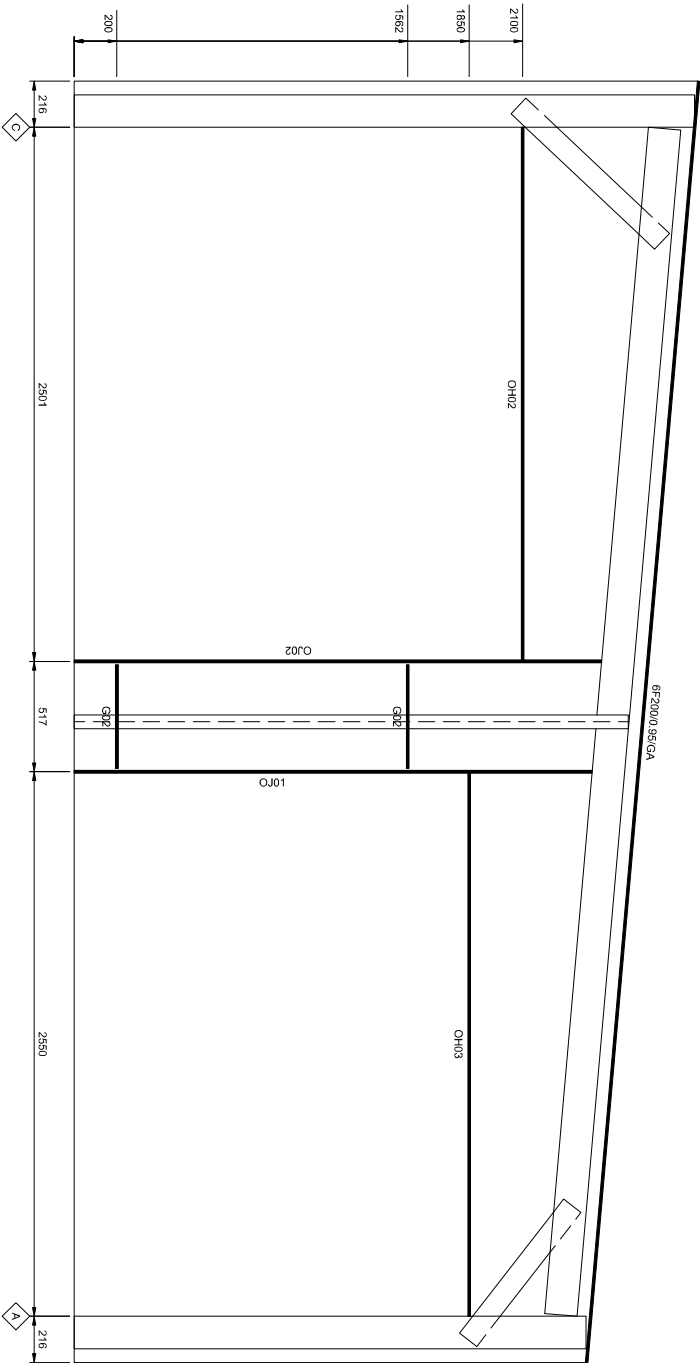
# Sidewall B Girt Layout

SCALE: 1:25

Frame Line C

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

MEMBER TABLE			
Mark	Product	Length	
6F2000.95.GA	24x74 Angle	Stick Length	
QJ2	T18x56	487 mm	
OH2	C10014	2501 mm	
OH3	C10014	2550 mm	
OL1	Z15012	2425 mm	
OL2	Z15012	2470 mm	



1

11

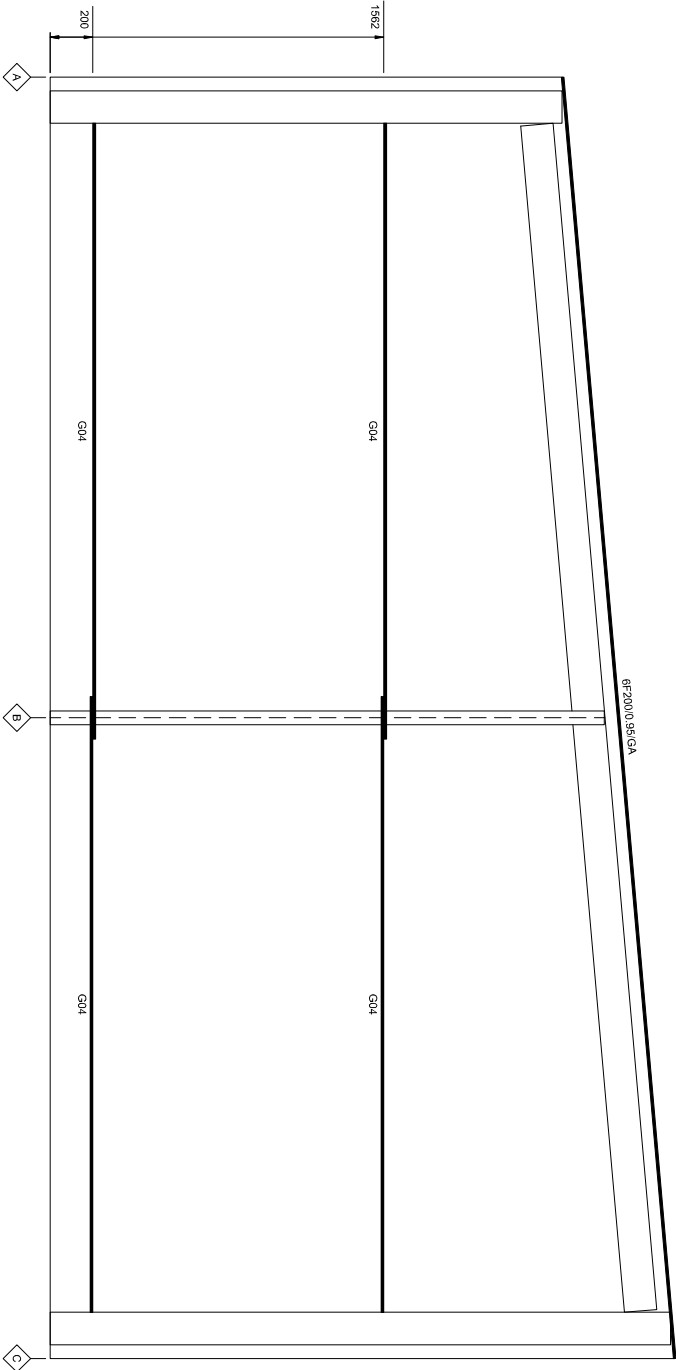
Endwall A Girt Layout

SCALE: 1:25

Frame Line 1



MEMBER TABLE			
Mark	Product	Length	
6F2000.95.GA	24x74 Angle	Stock Length	
G04	TT6455	2884 mm	



1

Endwall B Girt Layout

12

SCALE: 1:25

Frame Line 4



2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm	2447 mm

Sheeting starts with this sheet and  
moves across wall

1

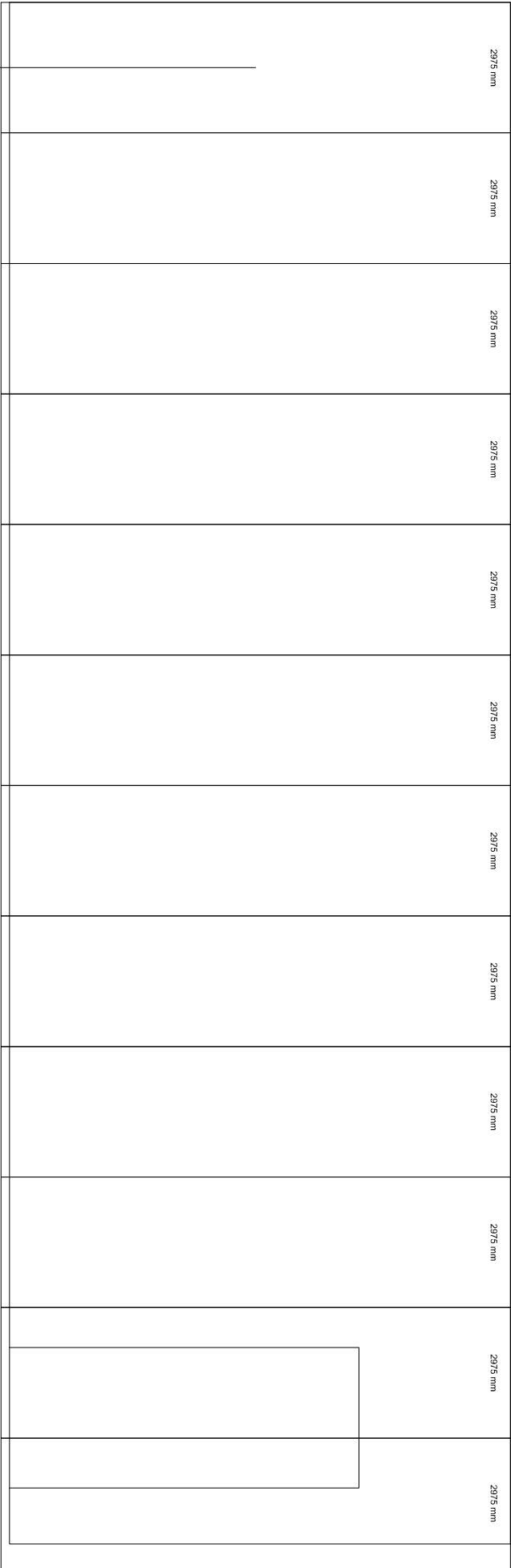
13

Sidewall A Sheeting Layout

Frame Line A

SCALE: 1:25





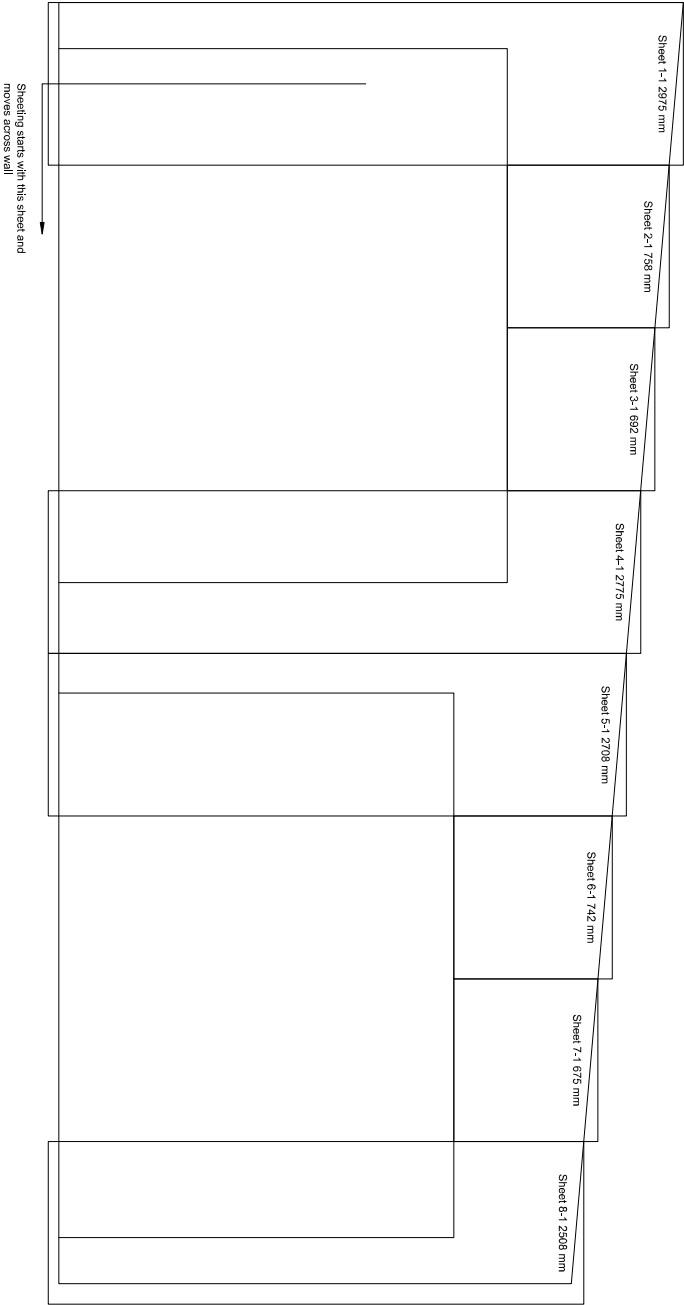
**1** Sidewall B Sheeting Layout

**14** SCALE: 1:25

Frame Line C

This illustration is for reference only, and is to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.





1

Endwall A Sheeting Layout

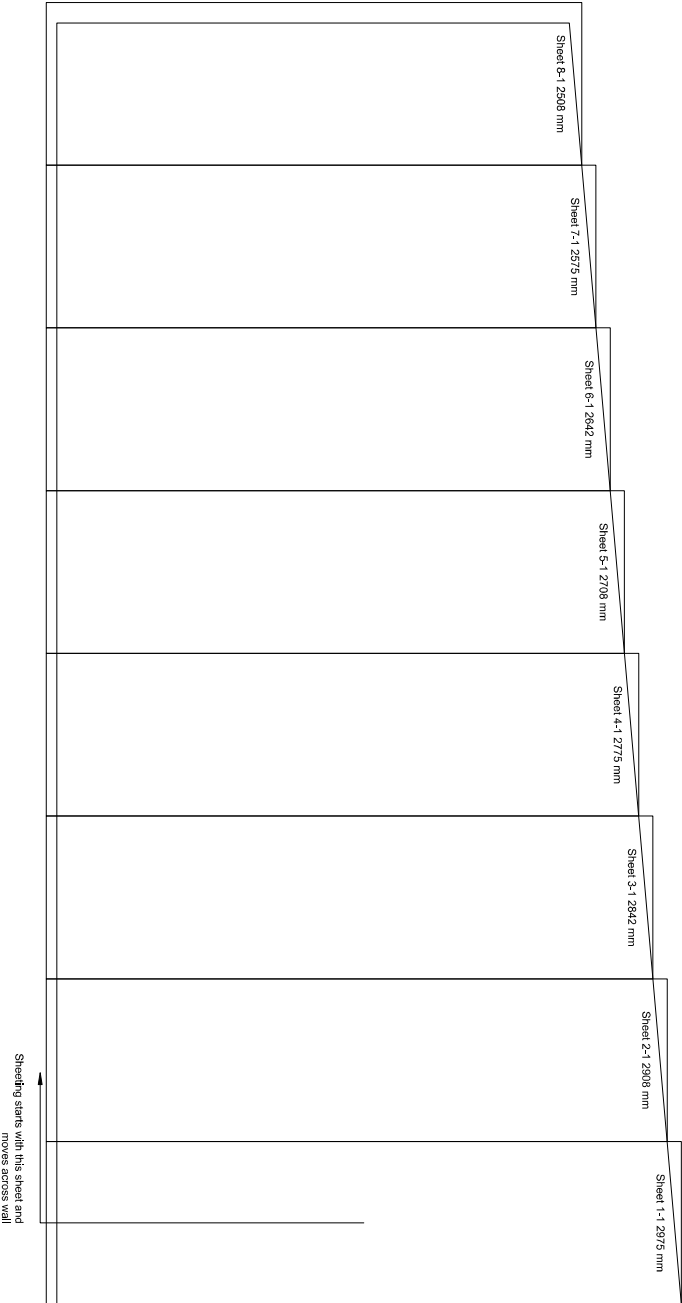
15

SCALE: 1:25

Frame Line 1







1  
16

Endwall B Sheeting Layout

SCALE: 1:25

Frame Line 4



**Generic Temporary Bracing Information**

The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

**Bracing Materials**

The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

**Temporary Bracing Location**

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2, can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.

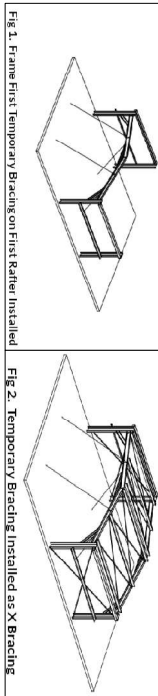


Fig 1. Frame First Temporary Bracing on First Rafter Installed

Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground And then tilted into place) then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.

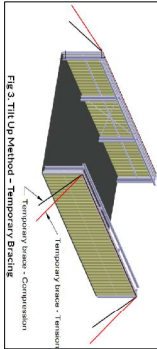


Fig 3. Tilt Up Method - Temporary Bracing

Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

**Additional Temporary Bracing**

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

**Bracing Removal**

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/Construction-work-steel-erection-Information-sheet>, 2016.  
<https://www.steel.org.au/Structural-steelwork-fabrication-and-erection-code-of-practice>, 2014.  
<https://www.standards.org.au/AS/NZS-5131:2016-Structural-steelwork-Fabrication-and-erection>.

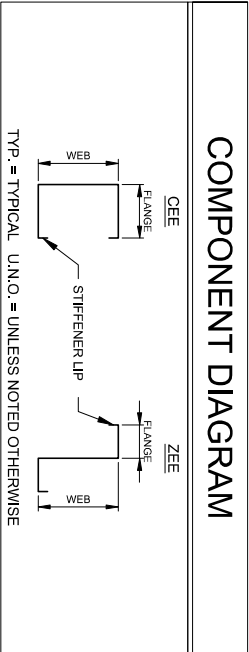
Support is also available at [support@actbuildingsystems.com](mailto:support@actbuildingsystems.com).

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

STRUCTURAL GENERAL NOTES

- 1.0 General**
- 1.1 These drawings are
- a) Justly owned by Steelline and Venn Engineering Pty Ltd
  - b) Provided for the sole purpose of obtaining building approval and guiding construction of a single building at the job address shown in the title block
  - c) Provided to be used for any other purpose without written authorisation from Steelline and Venn Engineering Pty Ltd.
  - d) Only valid if signed by the engineer and must not be altered in any way without signed approval from the engineer.
  - e) Produced to scale but dimensions shall not be obtained by measuring the drawings. All dimensions are in millimetres unless stated otherwise.
- 1.2 The engineer accepts no liability or responsibility for the contents of drawings that are invalid.
- 1.3 The drawings are to be used in accordance with the provisions of Venn Engineering Pty Ltd.
- 1.4 The engineer is not the project manager or site supervisor for this project. It is the responsibility of the project manager or site supervisor to ensure that the non-structural requirements of the Governing Building Code are considered and appropriately designed. This includes, but not limited to, the fire & bushfire design, access requirements, future roof access requirements, lighting, glazing and electrical design, etc.
- 2.0 Structural Design**
- 2.1 The structural framing components detailed in these drawings have been designed in accordance with the following documents for the design criteria detailed in these notes
- Governing Building Code 2022 National Construction Code – Building Code of Australia Volume 2 and 2022 Housing Provisions Standard
- Loading Standards AS/NZS 1170.0:2002(+AS) AS/NZS 1170.1:2002(+A2) AS/NZS 1170.2:2018
- 2.2 Cold formed Steel member standard AS/NZS 4600:2018
- 2.3 These drawings are also the limit of the Structural Design, any requirements for additional structural design of other items included in the project are specifically excluded if not shown on these drawings. This includes, but not limited to, requirements for additional loads that aren't specified including flood design loads, additional roof loads from solar panels, retaining walls required on site, driveway design etc.
- 2.4 The drawings are to be used in accordance with the provisions of the building code. The building is not considered complete until the installation of all components and details are in place and the building is ready to be occupied.
- 2.5 No alterations are to be made to the structure without written approval of the engineer. This includes, but not limited to, modification to the plans and/or specifications, be the installation of additional openings, increased roof loads, skylight roof streets or removal of cladding. If changes are made without written approval, such changes shall the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their full responsibility to replace or repair the condition of the building as decided by the engineer.
- 3.0 Design Criteria**
- Building class..... 10a
- Building Importance level..... 2
- Wind region..... A4
- Terrain category..... 2/8
- Topographic multiplier..... 1
- Shading multiplier..... 1
- Ultimate design wind speed..... 38.1 m/s
- Snow load..... 0.60 kPa
- Slab imposed load..... 2.50 kPa
- Allowable bearing capacity of foundation supporting slab..... 100 kPa
- Allowable bearing capacity of foundation supporting slab..... 50 kPa
- Soil Type..... Non-aggressive (not saline or acid sulfate)
- 4.0 Installation Building Contractor Responsibilities**
- 4.1 The contractor shall verify and confirm all site conditions and dimensions. Any discrepancies between drawings and site conditions shall be referred to the engineer for decision before proceeding with the work.
- 4.2 All workmanship and materials are to be in accordance with the Governing Building Code including all relevant Australian Standards and local statutory authorities except where varied by the contract documents.
- 4.3 The contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part is overstressed under construction activities. They shall provide all temporary bracing, shoring or other means to avoid excessive stresses and to hold structural elements in place during erection. These temporary provisions shall remain in place until sufficient permanent members are erected to ensure the safety of partially erected structures.
- 4.4 The contractor is responsible for meeting all laws regulating the erection of steel buildings including, but not limited to, Safe Work Australia guidelines. The contractor shall be responsible for the location of all services prior to commencing and shall be responsible for the repair of any damage caused to services.
- 5.0 Foundation**
- 5.1 The bearing capacity of the foundation supporting the footings and slab shall be confirmed before any concrete is placed.
- 5.2 No earth or debris is to fall into the footings or slabs before and during placing of concrete.
- 5.3 All footings shall be located centrally under walls and columns unless noted otherwise.
- 5.4 Concrete embedment depths do not apply to locations where any uncompacted fill or disturbed ground exists or where walls of the excavation will not stand without support. Request further advice from the engineer in these circumstances.
- 5.5 Fill used for the support of a slab on ground shall be compacted fill or rolled fill as in accordance with clause 6.4.2 of AS 2870-2011.
- 5.6 Slabs less than 108sqm in plan area are suitable for AS 2870-2011 site classes A, S & M. For larger slabs or for site classes M-D, H-1, H-D, H2, H2-D, E & E-D, the slab may experience cracking more than is considered normally acceptable. The cracking is considered of aesthetic concern only and should not effect the structural performance of the slab or shed. If this is not desired, contact the engineer for further advice.

- 6.0 Concrete**
- 6.1 Concrete placement and workmanship shall be in accordance with AS 3600-2018 & AS 2870-2011.
- 6.2 Concrete shall be
- a) N25 with slump of 100 mm in accordance with AS 1379-2007, with 20 mm maximum nominal aggregate size and no admixtures.
  - b) consolidated by mechanical vibration.
  - c) Cured for a minimum of 7 days using continuous ponding with potable water.
- 6.3 Reinforcement shall be installed in accordance with the following:
- 7.0 Reinforcement**
- 7.1 Reinforcement shall comply with AS/NZS 4671-2019.
- 7.2 Reinforcement is represented diagrammatically and not necessarily shown in true proportion.
- 7.3 Welding of reinforcement shall not be permitted without the approval of the engineer.
- 7.4 All reinforcement shall be securely supported in its correct position ensuring the correct cover during placing of concrete by approved bar chairs, spacers or support bars. Approved chairs include stainless steel or plastic bar chairs for bottom reinforcement and plastic tipped wire bar chairs for top reinforcement.
- 7.5 All chairs to be spaced at maximum of 750mm centres.
- 7.6 Cover to reinforcement shall be:
- a) 50mm for top surfaces of concrete in contact with the ground;
  - b) 30mm for top surfaces of slabs fully encased by the building without open bays or
  - c) 60mm for top surfaces of slabs more than 1 km from the coastline with open bays.
  - d) For buildings with open bays within 1km of the coast, contact the engineer for cover and concrete grade requirements.
  - e) Reinforcement shall be lapped 500mm for 12mmØ bars and 800mm for 16mmØ bars.
  - f) Mesh reinforcement shall be lapped such that the two outermost wires of one sheet overlap the two outermost wires of the other sheet by 25 mm.
  - g) Hooks, bends and cuts to be in accordance with AS 3600-2018 unless noted otherwise on drawings.
- 8.0 Anchor Bolts**
- 8.1 Anchor bolts shall be installed in accordance with the manufacturer's installation instructions.
- 8.2 Anchor bolts shall be installed in the concrete to be used in the drawings.
- 8.3 Thoroughly clean and blow the dust out of the holes using the cleaning accessories prescribed by the manufacturer's instructions.
- 8.4 Substitution of anchors bolts and chemical epoxy adhesive is not permitted unless written confirmation from the engineer is provided.
- 8.5 For chemical anchors, ensure load is not applied to the anchors whilst epoxy adhesive is curing.
- 9.0 Light Gauge Cold-formed Steel**
- 9.1 All light gauge cold-formed steel shall comply with AS 1397-2021 and be the following grades
- | Thickness(mm)       | Steel grade (yield stress, MPa) | Protective coating (g/m2) |
|---------------------|---------------------------------|---------------------------|
| BMT ≤ 1.0mm         | G550                            | Z350                      |
| 1.0mm < BMT ≤ 1.5mm | G550                            | Z350                      |
| 1.5mm ≤ BMT ≤ 3.0mm | G450                            | Z350                      |
- 9.2 Welding of light gauge cold-formed steel shall not be permitted.
- 9.3 Column and rafter members shall not be drilled or notched without prior approval of the engineer.
- 9.4 Round holes may be drilled through any girt or purlin member within the middle third of the depth of that member and not within 600mm of member end unless noted otherwise.
- 9.5 All bolts used to connect light gauge cold-formed steel members shall be
- a) Zinc coated 4.6 (min 3.6) grade A4-70 strong (lightened) complying to AS 1111.1-2015 & AS 1112.3-2015 unless noted otherwise.
  - b) No holes less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
  - c) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
  - d) All screws used to connect light gauge cold formed steel members (excluding steeling) shall be
  - e) 10g (min), self-drilling screws complying with AS 3566.1-2002.
  - f) Corrosion resistance class 4 in accordance with AS 3566.2-2002 for buildings within 1 km from the coastline with open bays or class 3 otherwise.
  - g) Spaced no less than 1.5 bolt diameters between centres.
  - h) Located no less than 1.5 bolt diameters from bolt centre to the end or edge of any light gauge member.
- 10.0 Roof & Wall Sheeting**
- 10.1 Roof & wall sheeting shall comply with AS 1397-2018 and have suitable corrosion protection complying with Table 7.2.2a of the 2022 Housing Provisions Standard.
- 10.2 During construction and maintenance, no foot traffic shall occur within end spans of sheeting, foot traffic shall occur
- a) Evenly across at least two ribs for corrugated profiled sheeting or
  - b) in the pans for pan-type profiled sheeting.
- 10.3 Any roof skylights shall be approved by the engineer
- 10.4 Safety mesh shall be installed in accordance with the building code
- 11.0 Door & Window Components**
- 11.1 Doors and windows shall be installed to match loadings and resist the ultimate limit state wind loading except for in cyclonic regions
- 11.2 Non-enclosed doors and windows are assumed to have filled at the ultimate limit state wind loading
- 11.3 Personal access doors shall be rated for the wind loading parameters stated in the design criteria (see section 3.0)
- 11.4 All windows shall be in accordance with AS 1288-2022 & AS 2047-2014 (+A2) as appropriate for the wind loading parameters stated in the design criteria (see section 3.0)



REV	DATE	DESCRIPTION	CUSTOMER NAME: Tom Doyle	DATE
A	02-10-2024	-	SITE ADDRESS: 121 Beaview Drive Old Beach, TAS, 7017	02-10-2024
				JOB NO. LAUS983320
				SHEET 1 of 10

**COLD FORMED BUILDINGS**

DESIGNED BY  
ACT BUILDING SYSTEMS

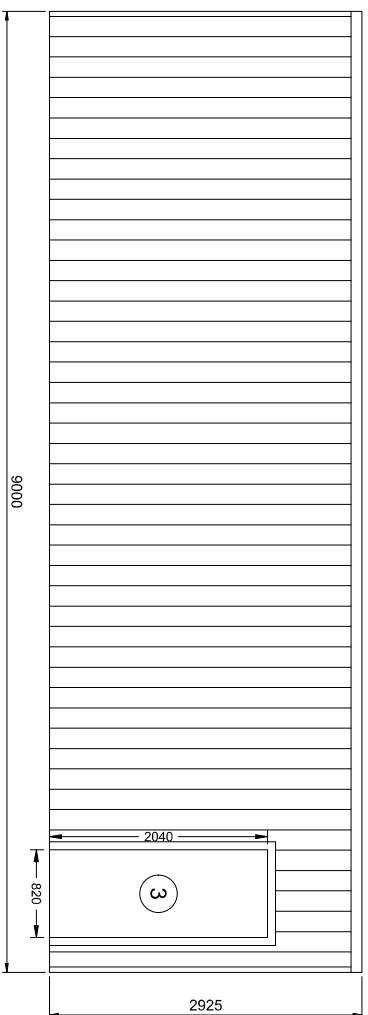
**VENN ENGINEERING**

PO Box 3984  
THIRROLL NSW 2515  
sheds@vennengineering  
AEN 99 626 802 257

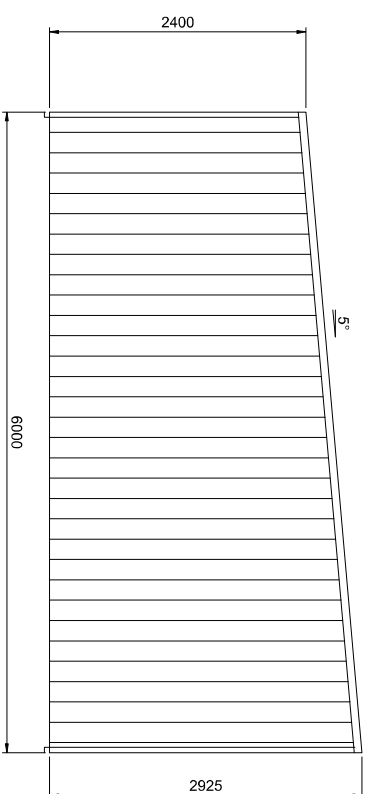
Signed .....  
Grant J Wood MEMBER OF THE ENGINEERING COUNCIL OF AUSTRALIA

Date 02-10-2024

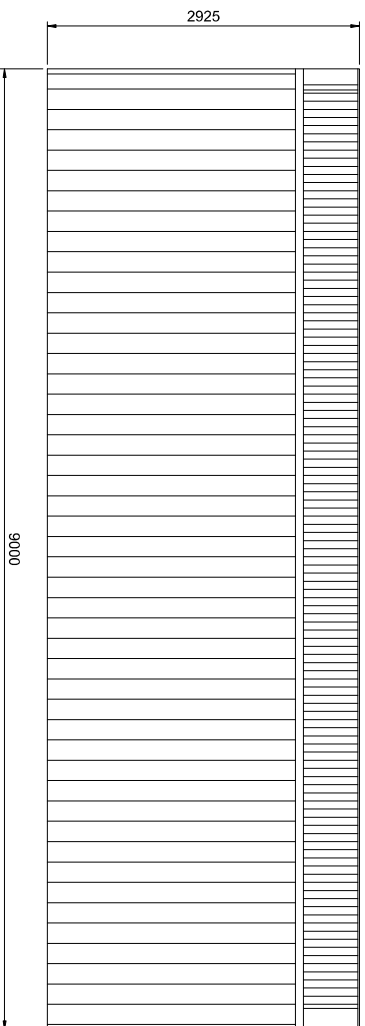
REGISTERED PROFESSIONAL ENGINEER (CIVIL) (No. 16489)  
REGISTERED PROFESSIONAL ENGINEER (STRUCTURAL) (No. 16587/163)  
REGISTERED PROFESSIONAL ENGINEER (MECHANICAL) (No. 16588/164)



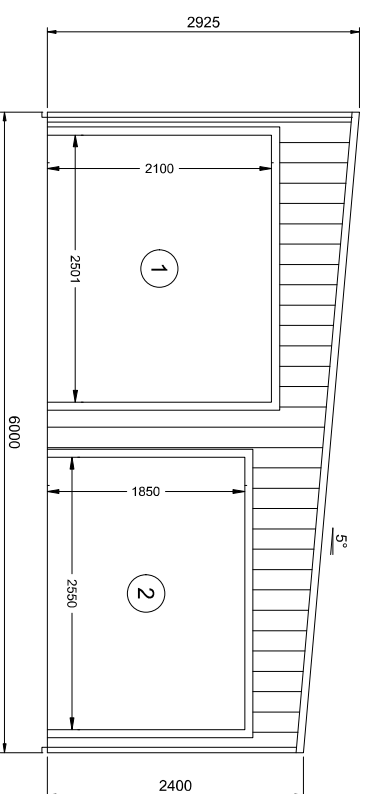
2  
2  
SIDEWALL B BUILDING ELEVATION  
SCALE: 1:50



3 REAR BUILDING ELEVATION  
2 SCALE: 1:50

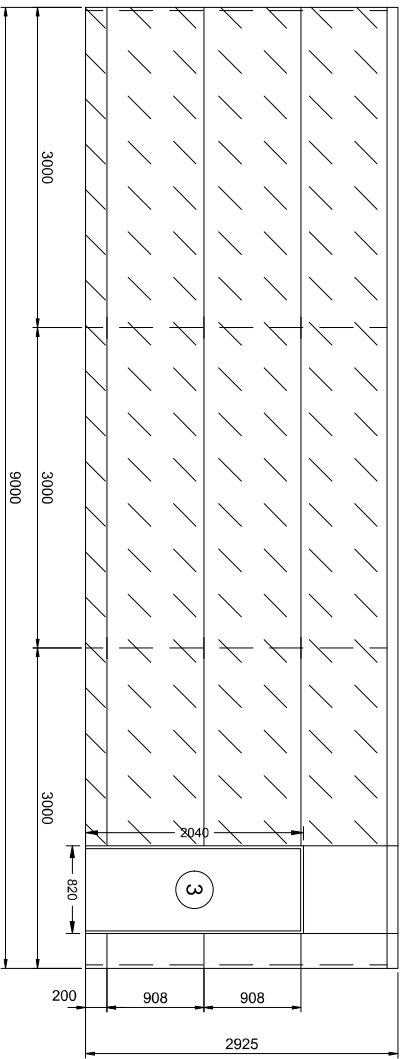


**1 SIDEWALL A BUILDING ELEVATION**  
**2** SCALE: 1:50

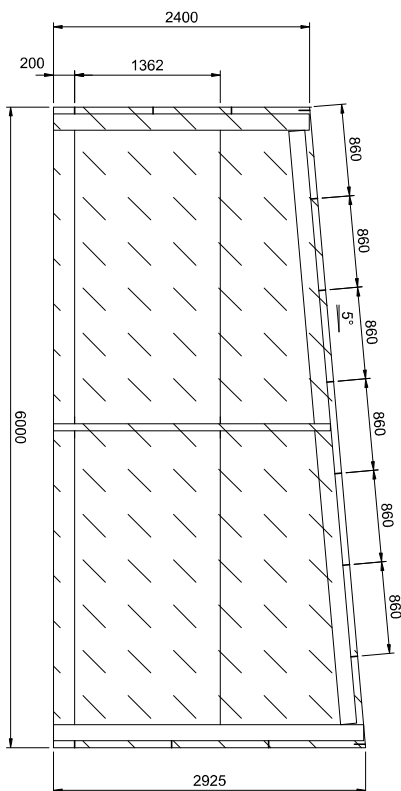


# FRONT BUILDING ELEVATION

[illegible]



2 SIDEWALL B FRAMING ELEVATION  
3 SCALE: 1:50

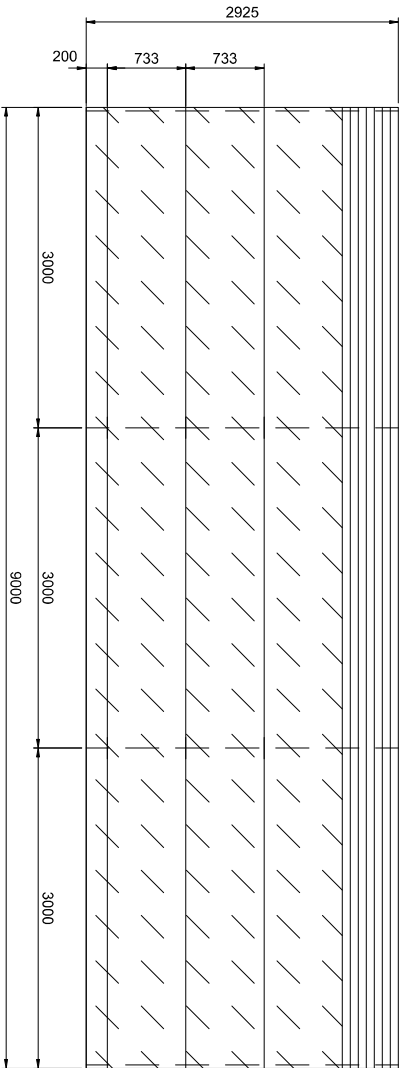


3 REAR FRAMING ELEVATION  
3 SCALE: 1:50  
FRAME #4

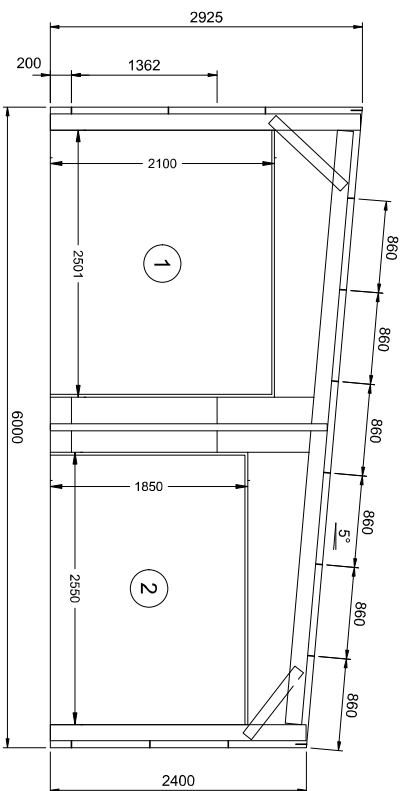
DIAPHRAGM SCHEDULE

SHEETING IN DIAPHRAGM SECTIONS (SHOWN AS HATCHED AREA ON ELEVATIONS) NOT TO BE CUT UNDER ANY CIRCUMSTANCES

WALL	DISTANCE FROM WALL EDGE
Sidewall 'A'	0-9000
Sidewall 'B'	1146-9000
Endwall 'B'	0-6000



1 SIDEWALL A FRAMING ELEVATION  
3 SCALE: 1:50



4 FRONT FRAMING ELEVATION  
3 SCALE: 1:50  
FRAME #1

REV	DATE	DESCRIPTION
A	02-10-2024	-

COLD FORMED BUILDINGS  
COLD FORMED BUILDING  
ACT BUILDING SYSTEMS

NEN  
ENGINEERING

PG Box 3964  
THIRROLL NSW 2515  
enqs@nen-engineering  
ABN 39 626 802 257

Signed .....  
Grant J Wood MEMBER OF THE ENGINEERING COUNCIL OF AUSTRALIA  
Registration No. 163841  
Registration Expiry Date 30/06/2026  
Registration No. 163841  
Registration Expiry Date 30/06/2026

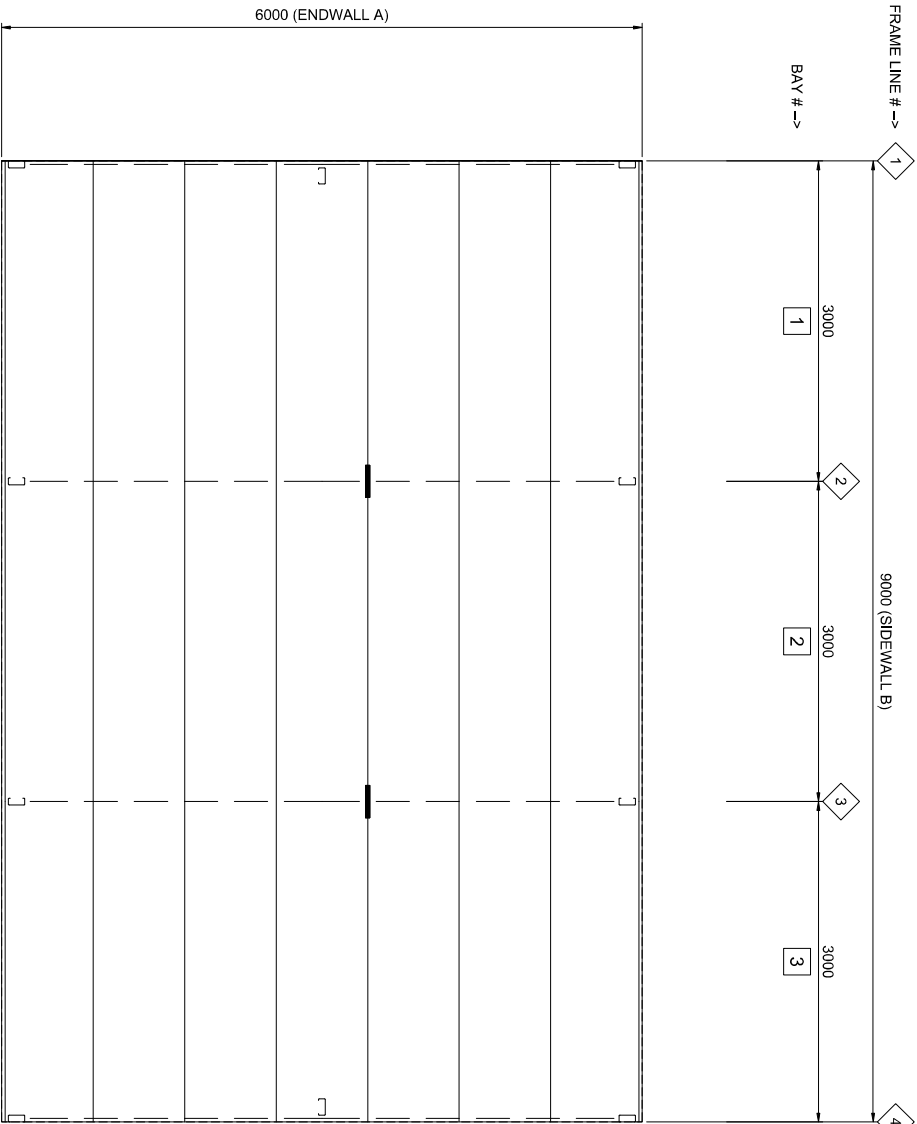
Date 02-10-2024

Customer Name: Tom Doyle  
Site Address: 121 Breaview Drive  
Old Beach,  
TAS, 7017

DATE 02-10-2024  
JOB NO. LAUS983320  
SHEET 3 of 10







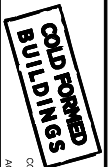
1  
5

## ROOF FRAMING PLAN

SCALE: 1:50

ROOF SHEETING IS USED AS DIAPHRAGM TO BRACE THE  
BUILDING AND IS NOT TO BE CUT UNDER ANY CIRCUMSTANCES

REV	DATE	DESCRIPTION
A	02-10-2024	-



PO Box 2984  
THIRROOL NSW 2515  
sheds@nen-engineering  
ABN 39 626 802 257

Signed .....  
Grant J Wood MBEA/CPENG NEN RECD  
Date 02-10-2024

Registered Professional Engineer (Civil) No. 145841  
Registration Expiry Date 30-06-2025  
Registration Expiry Date 30-06-2025  
Building Services Division (NSW) No. 10000000000000000000

Customer Name: Tom Doyle  
Site Address: 121 Breaview Drive  
Old Beach,  
TAS, 7017

DATE 02-10-2024  
JOB NO. LAUS95983520  
SHEET 5 of 10



CONCRETE SLAB EDGE

GRID

140 (PIER)

64 (GIRT)

PIER FOOTING

ENDWALL MULLION

C-15012 CEE

152 LONG COLUMN ANCHOR BRACKET

L69.5x103x3

(2) 12 mm DIAM. GRADE 4.6 BOLTS AT 70 O.C.

NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADD'L WEATHER/TIGHTNESS RECOMMENDATIONS.

GRID

140 (PIER)

64 (GIRT)

PIER FOOTING

ENDWALL MULLION

C-15012 CEE

152 LONG COLUMN ANCHOR BRACKET

L69.5x103x3

(2) 12 mm DIAM. GRADE 4.6 BOLTS AT 70 O.C.

CONCRETE SLAB

LEVEL

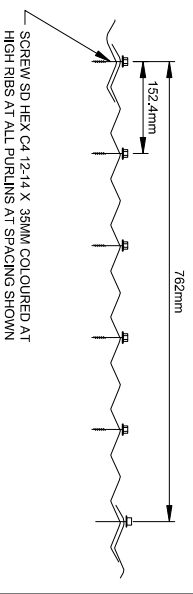
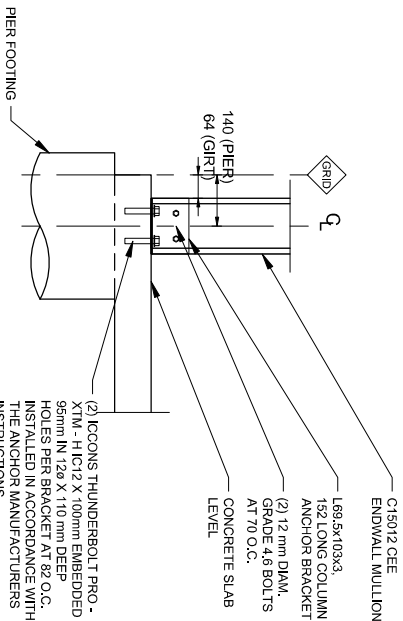
(2) ICONS THUNDERBOLT PRO - XTM - H IC12 X 100mm EMBEDDED 95mm IN 126 X 110 mm DEEP HOLES PER BRACKET AT 82 O.C. INSTALLED IN ACCORDANCE WITH THE ANCHOR MANUFACTURERS INSTRUCTIONS

762mm

152.4mm

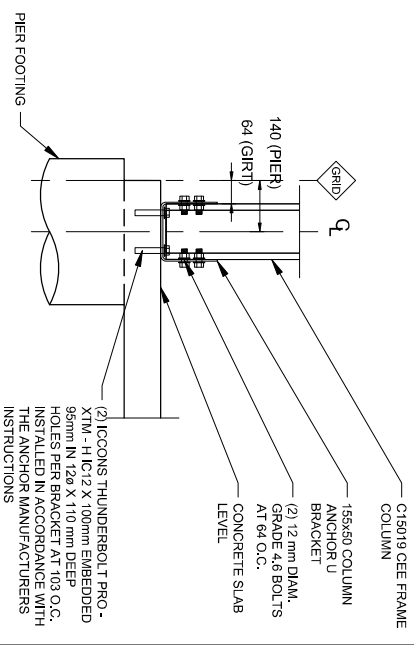
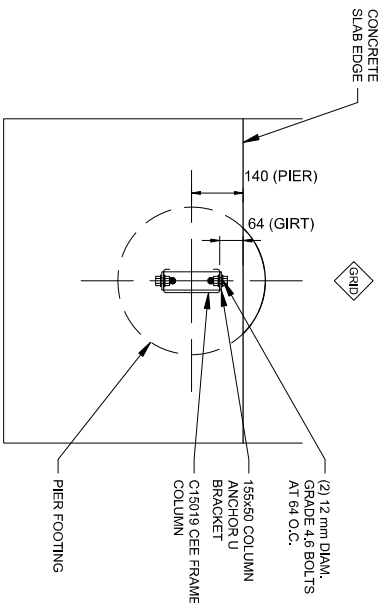
SCREW SD HEX C4 12.14 X 35MM COLOURED AT HIGH RIBS AT ALL PURLINS AT SPACING SHOWN

Steelline  
Corrugated 0.42



## H

### ROOF SHEETING



## F4 FRAME COLUMN BASE DETAIL 2

REV	DATE	DESCRIPTION
A	02-10-2024	-



**COLD FORMED  
BUILDINGS**

ALBERTA  
REGISTERED BUILDING  
DESIGNERS LTD.

COLD FORMED BUILDING  
DESIGNED BY  
ACB BUILDING SYSTEMS



**NEN**  
ENGINEERING

PO Box 3064  
THIRLOLL, NSW 2515  
sheds@nenengineering  
ASN 39 526 802 257

Signed ..... *Grant J Wood* ..... Date 02-10-2024

Grant J Wood (MEMBER OF THE ENGINEERING COUNCIL OF AUSTRALIA)

Registered Professional Engineer (CE) (No. 14349)

Building Services Provider (Engineer) (CAB) (No. 6000002426)

Customer Name: Tom Doyle

Site Address: 121 Breanher Drive

Old Beach,

TAS, 7017

DATE 02-10-2024

JOB NO. LAUS5983520

SHEET 7 of 10



ANOTHER  
FORMED BUILDING  
DESIGNED BY  
BUILDING SYSTEMS

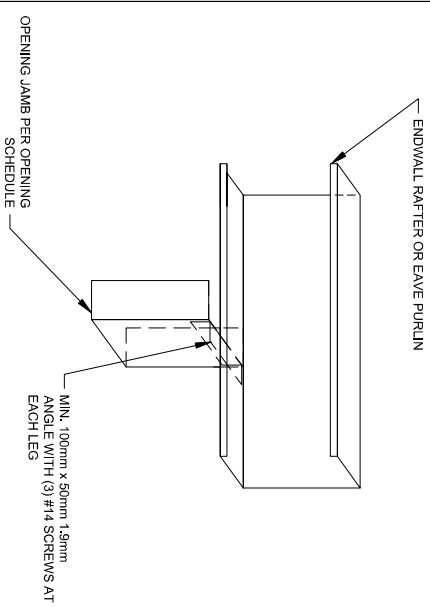
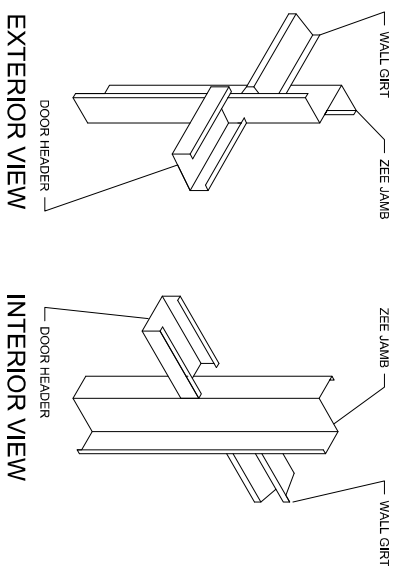
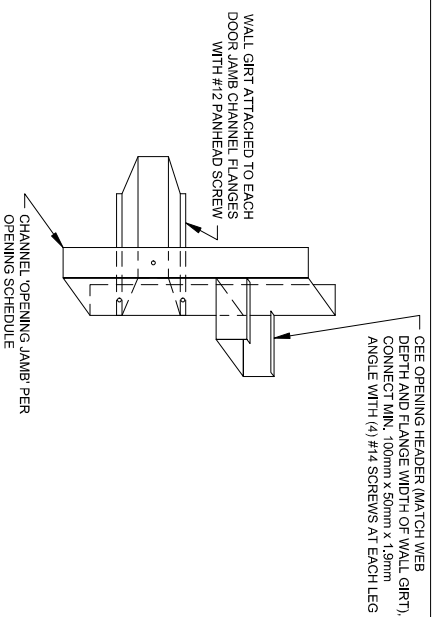


**VENN**  
ENGINEERING

[illegible]

Customer Name: Tom Doyle  
Site Address: 121 Breaview Drive  
Old Beach,  
TAS, 7017

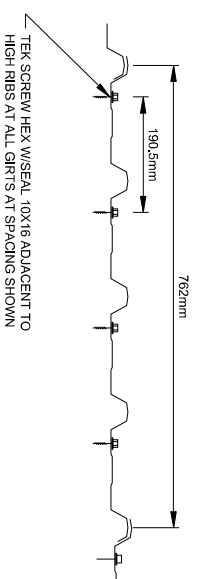
DATE 02-10-2024  
JOB NO. LAUS95983520  
SHEET 7 of 10



## K1

### OPENING CHANNEL JAMB GIRT CONNECTION

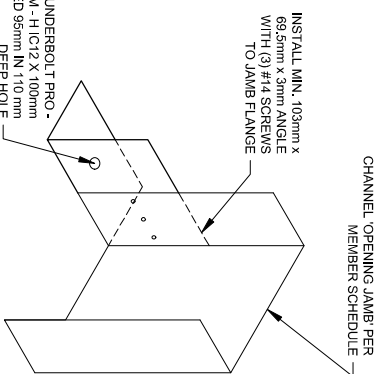
NOTE: ONLY STRUCTURAL INFORMATION IS INCLUDED IN THIS DETAIL. CONSULT PANEL MANUFACTURER FOR ADDTL. WEATHER TIGHTNESS RECOMMENDATIONS.



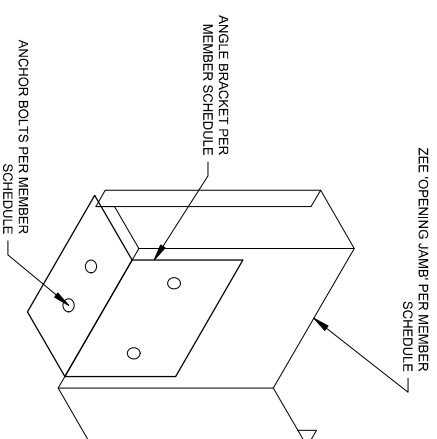
Steelclad 0.42

## K2

### OPENING ZEE JAMB GIRT CONNECTION



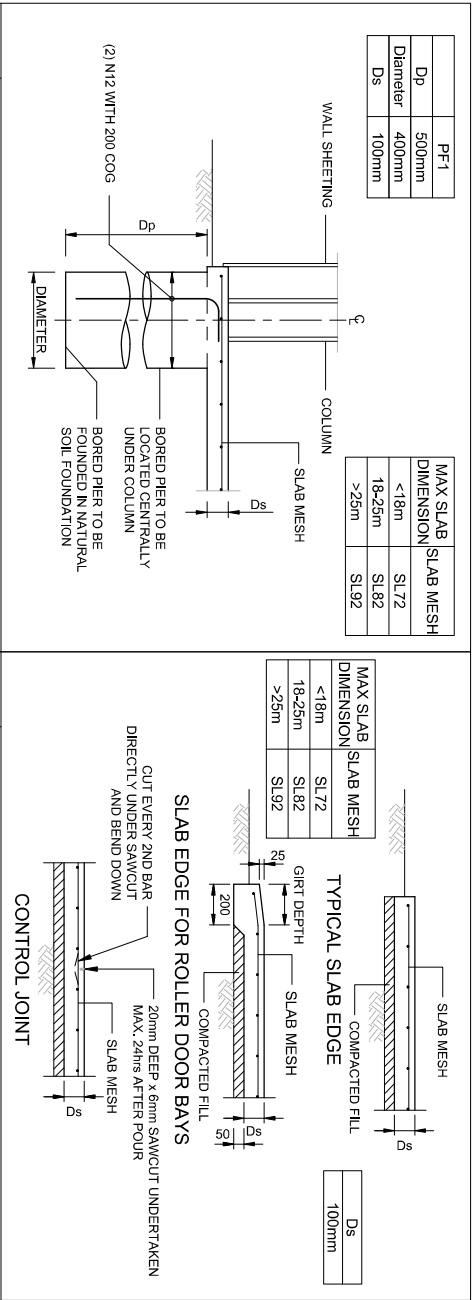
## L1 CHANNEL JAMB TO CEE CONNECTION



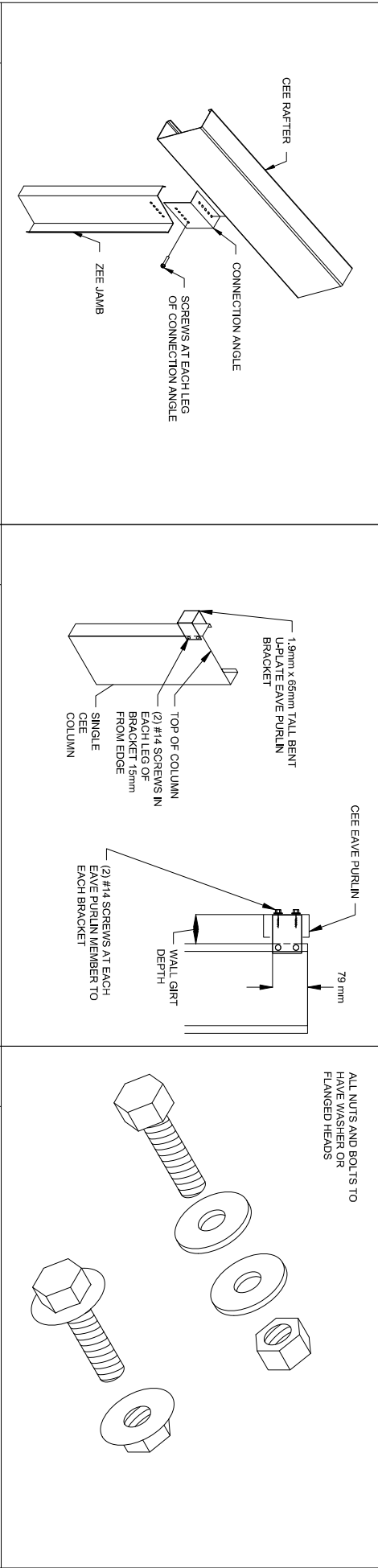
1	WALL SHEETING	J1	PA DOOR JAMB BASE CONNECTION	J2	ROLLER DOOR JAMB BASE CONNECTION
---	---------------	----	------------------------------	----	----------------------------------

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

[illegible]



Y	SLAB WITH PIER FOOTING DETAIL	Z	SLAB DETAIL
---	-------------------------------	---	-------------



L2	ZEE JAMB TO RAFTER	O	EAVE PURLIN BRACKET	T	BOLT OPTIONS
----	--------------------	---	---------------------	---	--------------

DETAIL DIMENSIONS ARE SHOWN IN MM UNLESS SPECIFIED OTHERWISE

REV	DATE	DESCRIPTION
A	02-10-2024	-

**COLD FORMED BUILDINGS**

REGISTERED  
COLD FORMED BUILDING  
AND BUILDING SYSTEMS

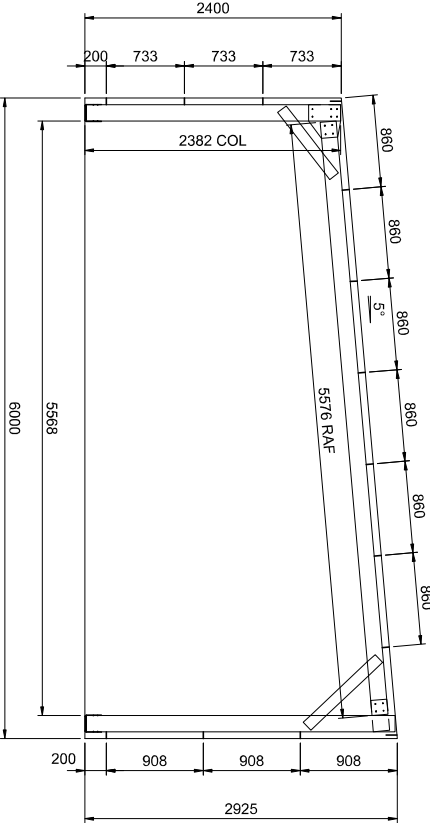
**NEN**  
ENGINEERING

PO Box 3984  
THIRROLL NSW 2515  
sheds@nen.engineering  
ABN 39 626 802 257

Signed:   
Grant J WOOD MEMBER OPEN NEN REGD  
Registered Professional Engineer (CLD, RNE, NEN)  
Registration No. 143894  
Registration Expiry Date: 30/06/2026  
Registration No. 143894  
Registration Expiry Date: 30/06/2026

Customer Name: Tom Doyle  
Site Address: 121 Breaview Drive  
Old Beach,  
TAS, 7017

DATE: 02-10-2024  
JOB NO. LAUS95983620  
SHEET 9 of 10



1 INTERNAL FRAMING ELEVATION

10 SCALE: 1:50

FRAMES 2, 3

MEMBER SCHEDULE			
COMPONENT		TYPE	
CLEAR SPAN PORTAL (FRAMES 2, 3)	RAFTER	Single C15019	
	COLUMN	Single C15019	
	APEX BRACE	-	
	KNEE BRACE	Single C10015	
	BRACKET TYPE	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
ENDWALL PORTAL (FRAME 1)	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	RAFTER	Single C15019	
	COLUMN	Single C15019	
	APEX BRACE	-	
	KNEE BRACE	Single C10015	
ENDWALL B PORTAL (FRAME 4)	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	RAFTER	Single C15019	
	COLUMN	Single C15019	
	APEX BRACE	-	
	KNEE BRACE	-	
ENDWALL MULLION	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	COLUMN	Single C15012	
	BRACKET TYPE	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
ROOF PURLINS	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	MEMBER	Single TH6495 @ 850mm centres	
	MEMBER	Single C10015	
	MEMBER	Single TH6495 @ 733mm centres	
EAVE PURLIN	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	MEMBER	Single TH6495 @ 733mm centres	
	MEMBER	Single C10015	
	MEMBER	Single TH6495 @ 1362mm centres	
SIDEWALL GIRTS	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	MEMBER	Single TH6495 @ 733mm centres	
	MEMBER	Single C10015	
	MEMBER	Single TH6495 @ 1362mm centres	
OPENINGS (1-2)	BASE CONNECTION	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(2) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	MEMBER	Single TH6495 @ 733mm centres	
	MEMBER	Single C10015	
	MEMBER	Single TH6495 @ 1362mm centres	
OPENING (3)	BASE CONNECTION	(1) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	ANCHOR BOLTS	(1) HCCONS Thunderbolt Pro - X1TM-H1C12 x 100mm	
	MEMBER	Single TH6495 @ 733mm centres	
	MEMBER	Single C10015	
	MEMBER	Single TH6495 @ 1362mm centres	

REV	DATE	DESCRIPTION	Customer Name: Tom Doyle	DATE
A	02-10-2024	-	Site Address: 121 Breaview Drive Old Beach, TAS, 7017	02-10-2024
			JOB NO. LAUS983320	
			SHEET 10 of 10	

DESIGNED BY  
ACT BUILDING SYSTEMS

COLD FORMED BUILDING  
ACT BUILDING SYSTEMS

COLD FORMED BUILDINGS

MEMBER  
ENGINEERING

PO Box 3984  
THIRROLL NSW 2515  
sheds@vonnengineering  
ABN 39 626 802 257

Grant J Wood

MEMBER ENGINEERING

02-10-2024

Signed



**Generic Temporary Bracing Information**

The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

**Bracing Materials**

The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'X-brace' bays in both directions, until the final bracing systems are fully installed. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

**Temporary Bracing Location**

The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2, can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.

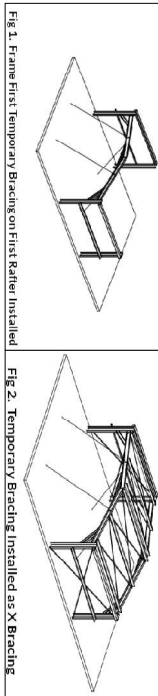


Fig 1. Frame First Temporary Bracing on First Rafter Installed

Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground And then tilted into place) then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed.

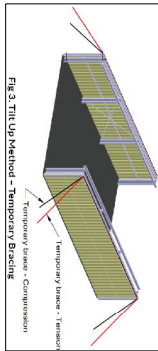


Fig 3. Tilt Up Method - Temporary Bracing

Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads – whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

**Additional Temporary Bracing**

The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.

**Bracing Removal**

The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:

<https://www.safeworkaustralia.gov.au/Construction-work-steel-erection-Information-sheet>, 2016.  
<https://www.steel.org.au/Structural-steelwork-fabrication-and-erection-code-of-practice>, 2014.  
<https://www.standards.org.au/AS/NZS-5131:2016-Structural-steelwork-Fabrication-and-erection>.

Support is also available at [support@actbuildingsystems.com](mailto:support@actbuildingsystems.com).

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.